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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,012	09/12/2000	Masahiro Yatake	U 012948-0	6074

7590

12/19/2001

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EXAMINER

FAISON, VERONICA F

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 12/19/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/660,012	Applicant(s) YATAKE ET AL.	
	Examiner Veronica F. Faison	Art Unit 1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 5-21 is/are rejected.
- 7) ☒ Claim(s) 3 and 4 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/370,783.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and 12 recite the term "bond" in its description of K, however it is unclear what applicant means by bond. For instance, is it a single carbon bond? Please clarify.

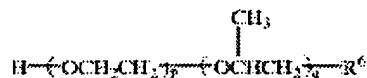
### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, and 5-10, 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai et al.

Nagai et al. teach an image recording liquid comprising a coloring agent and a solvent in which the coloring agent is dispersed or dissolved which is applied to a recording material a colorless or light colored image recording acceleration liquid containing a surfactant and a viscosity-increasing compound capable of increasing the viscosity of the recording liquid (abstract). The surfactant used in the image recording acceleration liquid comprise at least one compound for example formula (5)



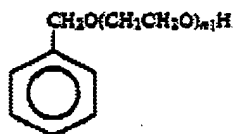
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Wherein R6 is a carbon chain having 6 to 14 carbon atoms, which may be branched, and p and q are each independently an integer of 0 to 20 (col. 7 line 23-col. 8 line 37). The image recording acceleration liquid comprises water as a main liquid medium. To impart the desired physical properties to the image recording acceleration liquid, to prevent the image recording acceleration liquid from drying, and to improve the solubility stability of the surfactant and the compound for making insoluble the coloring agent contained in the recording liquid, water-soluble organic solvents can be used including polyhydric alcohols such as ethylene glycol monoethyl ether, diethylene glycol monobutyl ether and ethylene glycol monobenzyl ether. The organic solvents can be used alone or in combination when used with water (col. 17-50). The coloring agent may be water-resistant and light resistant water-soluble dye or a pigment (col. 12 line 11+). The surfactants represented by formulas (1) to (5) and other surfactants may be added to the recording liquid, whereby the surface tension of the recording liquid can be adjusted so as to improve the penetrability of the recording liquid into the recording liquid. Surfactants may also improve the wettability of a head member of an ink jet printer with the recording liquid and the ejection stability of the recording liquid (col. 14 lines 24-31). The only limitation in the claims not found by the Examiner is the average molecular weight. However, this limitation is considered inherent because there does not appear to be any reason why the cited reference would not contain a surfactant with applicants claimed molecular weight. Therefore it would have been obvious to use the ink composition of Nagai et al. to improve the wettability of the surface of the recording material.

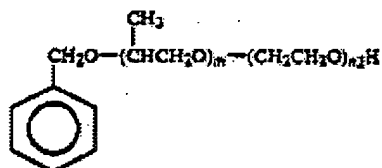
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Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ise et al.

Ise et al teach an ink composition comprising a water-soluble dye, water and at least one benzyl ether represented by the general formulas:



(wherein  $n_1$  stands for an integer of 3 to 15) and



(wherein  $m$  stands for an integer of 1 to 15 and  $n_2$  for 0 or an integer of 1 to 14, providing that  $1 \leq m + n_2 \leq 15$  is satisfied).

The reference also teaches that a mixture of two or more benzyl ethers of the structural formulas (1) and (2) may be used. See col. 3 line 19-col.4 line 40. The reference suggests the claimed invention therefore it would have been obvious to one of ordinary skill in the art to use the composition as taught by Ise et al.

### ***Allowable Subject Matter***

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***


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The remaining references listed on forms 892 has been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Veronica Faison  
December 17, 2001

  
C. MELISSA KOSLOW  
PRIMARY EXAMINER